1/4

atggcggagg aaggagccgt ggccgtctgc gtgcgagtgc ggccgctgaa cagcagagaa gaatcacttg gagaaactgc ccaagtttac tggaaaactg acaataatgt catttatcaa gttgatggaa gtaaatcctt caattttgat cgtgtctttc atggtaatga aactaccaaa aatgtgtatg aagaaatagc agcaccaatc atcgattctg ccatacaagg ctacaatggt actatatttg cctatggaca gactgcttca ggaaaaacat ataccatgat gggttcagaa gatcatttgg gagttatacc cagggcaatt catgacattt tccaaaaaat taagaagttt cctgataggg aatttctctt acgtgtatct tacatggaaa tatacaatga aaccattaca gatttactct gtggcactca aaaaatgaaa cctttaatta ttcgagaaga tgtcaatagg aatgtgtatg ttgctgatct cacagaagaa gttgtatata catcagaaat ggctttgaaa tggattacaa agggagaaaa gagcaggcat tatggagaaa caaaaatgaa tcaaagaagc agtcgttctc ataccatctt taggatgatt ttggaaagca gagagaaggg tgaaccttct aattgtgaag gatctgttaa ggtatcccat ttgaatttgg ttgatcttgc aggcagtgaa agagetgete aaacaggege tgeaggtgtg eggeteaagg aaggetgtaa tataaatega agcttattta ttttgggaca agtgatcaag aaacttagtg atggacaagt tggtggtttc ataaattatc gagatagcaa gttaacacga attctccaga attccttggg aggaaatgca aagacacgta ttatctgcac aattactcca gtatcttttg atgaaacact tactgctctc cagtttgcca gtactgctaa atatatgaag aatactcctt atgttaatga ggtatcaact gatgaagete teetgaaaag gtatagaaaa gaaataatgg atettaaaaa acaattagag gaggtttctt tagagacgcg ggctcaggca atggaaaaag accaattggc ccaacttttg gaagaaaaag atttgcttca gaaagtacag aatgagaaaa ttgaaaactt aacacggatg ctggtgacct cttcttccct cacgttgcaa caggaattaa aggctaaaag aaaacgaaga gttacttggt gccttggcaa aattaacaaa atgaagaact caaactatgc agatcaattt aatataccaa caaatataac aacaaaaaca cataagcttt ctataaattt attacgagaa attgatgaat ctgtc ggtaccatatgggaattcgaagcttacgtagaacaaaactcatctc agaagaggatctgaatagcgccgtcgaccatcatcatcatcatcat

FIG.1

PCT/US03/18203

2/4

1	MAEEGAVAVC	VRVRPLNSRE	ESLGETAQVY	WKTDNNVIYQ	VDGSKSFNFD	RVFHGNETTK
61	NVYEETAAPI	IDSAIOGYNG	TIFAYGQTAS	GKTYTMMGSE	DHLGVIPRAI	HDIFQKIKKF
121	PDREFLLRVS	YMEIYNETIT	DLLCGTQKMK	PLIIREDVNR	NVYVADLTEE	VVYTSEMALK
181	WITKGEKSRH	YGETKMNQRS	SRSHTIFRMI	LESREKGEPS	NCEGSVKVSH	LNLVDLAGSE
241	RAAOTGAAGV	RLKEGCNINR	SLFILGQVIK	KLSDGQVGGF	INYRDSKLTR	ILQNSLGGNA
301	KTRIICTITP	VSFDETLTAL	QFASTAKYMK	NTPYVNEVST	DEALLKRYRK	EIMDLKKQLE
361	EVSLETRAQA	MEKDQLAQLL	EEKDLLQKVQ	NEKIENLTRM	LVTSSSLTLQ	QELKAKRKRR
421	VTWCLGKINK	MKNSNYADQF	NIPTNITTKT	HKLSINLLRE	IDESVGTIWE	FEAYVEQKLI
481	SEEDLNSAVD	ННННН				

FIG.2

atggcggagg aaggagccgt ggccgtctgc gtgcgagtgc ggccgctgaa cagcagagaa gaatcacttg gagaaactgc ccaagtttac tggaaaactg acaataatgt catttatcaa gttgatggaa gtaaatcctt caattttgat cgtgtctttc atggtaatga aactaccaaa aatgtgtatg aagaaatagc agcaccaatc atcgattctg ccatacaagg ctacaatggt actatatttg cctatggaca gactgcttca ggaaaaacat ataccatgat gggttcagaa gatcatttgg gagttatacc cagggcaatt catgacattt tccaaaaaat taagaagttt cctgataggg aatttctctt acgtgtatct tacatggaaa tatacaatga aaccattaca gatttactct gtggcactca aaaaatgaaa cctttaatta ttcgagaaga tgtcaatagg aatgtgtatg ttgctgatct cacagaagaa gttgtatata catcagaaat ggctttgaaa tggattacaa agggagaaaa gagcaggcat tatggagaaa caaaaatgaa tcaaagaagc agtcgttctc ataccatctt taggatgatt ttggaaagca gagagaaggg tgaaccttct aattgtgaag gatctgttaa ggtatcccat ttgaatttgg ttgatcttgc aggcagtgaa agagctgctc aaacaggcgc tgcaggtgtg cggctcaagg aaggctgtaa tataaatcga agcttattta ttttgggaca agtgatcaag aaacttagtg atggacaagt tggtggtttc ataaattatc gagatagcaa gttaacacga attctccaga attccttggg aggaaatgca aagacacgta ttatctgcac aattactcca gtatcttttg atgaaacact tactgctctc cagtttgcca gtactgctaa atatatgaag aatactcctt atgttaatga ggtatcaact gtcgacaagcttgcggccgcactcgagcaccaccaccaccaccac

FIG.3

4/4

1 MAEEGAVAVC VRVRPLNSRE ESLGETAQVY WKTDNNVIYQ VDGSKSFNFD RVFHGNETTK 61 NVYEEIAAPI IDSAIQGYNG TIFAYGQTAS GKTYTMMGSE DHLGVIPRAI HDIFQKIKKF 121 PDREFLLRVS YMEIYNETIT DLLCGTQKMK PLIIREDVNR NVYVADLTEE VVYTSEMALK 181 WITKGEKSRH YGETKMNQRS SRSHTIFRMI LESREKGEPS NCEGSVKVSH LNLVDLAGSE 241 RAAQTGAAGV RLKEGCNINR SLFILGQVIK KLSDGQVGGF INYRDSKLTR ILQNSLGGNA 301 KTRIICTITP VSFDETLTAL QFASTAKYMK NTPYVNEVST VDKLAAALEH HHHHH

FIG.4